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EXAMINER	
CURS, NATHAN M	
ART UNIT	**PAPER NUMBER**
2633	

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/892,918	Applicant(s) KAJIYA ET AL.	
	Examiner Nathan Curs	Art Unit 2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 July 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☒ Claim(s) *13 and 14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 July 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3 and 5*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 13 and 14 are objected to because of the following informalities: the phrase "providing the second signal generator to generate an error signal to [minimize/maximum] value of frequency component" has improper grammar. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 12-14, in each claim, the phrase "said providing" is unclear because it does not distinguish which of the multiple "providing" limitations is being referred to in claim 11.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 5, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Ooi et al. (US Patent No. 6362913).

Regarding claim 5, Ooi et al. disclose an optical transmission apparatus for transmitting an optical pulse string having a frequency two times that of a driving signal, said optical transmission apparatus comprising: a Mach-Zehnder optical modulator (fig. 25, element 52); a light source which inputs an optical signal into said optical modulator (fig. 25, element 51); a driving unit which inputs the driving signal into said optical modulator (fig. 25, element 53); a converting unit which takes out a part of an optical signal output from said optical modulator and converts that part of the optical signal into electric signal (fig. 25, elements 56 and 57a); an extracting unit which extracts a frequency component two times that of the driving signal included in the electric signal converted by said converting unit (fig. 25, element 2fo and col. 22, lines 24-36); an error signal generating unit which generates an error signal of a bias voltage for maximizing a value of the frequency component two times that of the driving signal extracted by said extracting unit (fig. 25 and col. 22, lines 24-36); and a bias voltage control unit which applies a bias voltage added with an error signal of the bias voltage to said optical modulator (fig. 25, element 58) (col. 22, lines 18-49).

Regarding claim 10, Ooi et al. disclose a bias voltage control method for an optical modulator to be used for an optical transmission apparatus that inputs an optical signal into a Mach-Zehnder optical modulator (fig. 25, element 52), applies a driving signal and a bias voltage to said optical modulator (fig. 25, elements 53 and 58), and transmits an optical pulse string having a frequency two times that of the driving signal (col. 22, lines 24-36), the method comprising the steps of: taking out a part of an optical signal output from said optical modulator and converting that part of the optical signal into electric signal (fig. 25, elements 56 and 57a); extracting a frequency component two times that of the driving signal from the obtained electric

signal (fig. 25, element 2fo and col. 22, lines 24-36); generating an error signal of a bias voltage for maximizing a value of the frequency component two times that of the driving signal (fig. 25 and col. 22, lines 24-36); and applying a bias voltage obtained as a result of addition of the bias voltage and a voltage corresponding to the error signal to said optical modulator (fig. 25, element 58) (col. 22, lines 18-49).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admission of prior art. When the applicant states that something is conventional, it is taken as being available as prior art against the claims. Admitted prior art can be used in obviousness rejections.

Regarding claim 1, the applicant's specification discloses as conventional an optical transmission apparatus for transmitting an optical pulse string having a frequency two times that of a driving signal, said optical transmission apparatus comprising: a Mach-Zehnder optical modulator; a light source which inputs an optical signal into said optical modulator; a driving unit which inputs the driving signal into the optical modulator; a converting unit which takes out a part of an optical signal output from said optical modulator and converts that part of the optical signal into electric signal; an extracting unit which extracts a frequency component of the driving signal included in the electric signal converted by said converting unit; an error signal generating unit which generates an error signal of a bias voltage for minimizing a value of a frequency

component of the driving signal extracted by said extracting unit; and a bias voltage control unit which applies a bias voltage obtained as a result of addition of the bias voltage and a voltage corresponding to the error signal to said optical modulator (figs. 12-15 and page 2, line 23 to page 9, line 15). It would have been obvious to one of ordinary skill in the art at the time of the invention that the claimed apparatus is conventional, as disclosed by the applicant.

Regarding claim 4, the applicant's specification discloses as conventional the optical transmission apparatus according to claim 1 further comprising a dither signal generating unit which generates a dither signal that is input into the error signal generating unit and the bias voltage control unit, wherein said error signal generating unit carries out a synchronous detection by multiplying a dither signal to a frequency component of a driving signal or a frequency component two times that of the driving signal extracted by said extracting unit, and outputs a result of this synchronous detection to the bias voltage control unit as an error signal of the bias voltage, and said bias voltage control unit applies to said optical modulator a signal obtained by super imposing the error signal of the bias voltage with the bias voltage and the dither signal (figs. 12, elements 112 and 117 and page 2, line 23 to page 5, line 20). It would have been obvious to one of ordinary skill in the art at the time of the invention that the claimed apparatus is conventional, as disclosed by the applicant.

Regarding claim 9, the applicant's specification discloses as conventional a bias voltage control method for an optical modulator to be used for an optical transmission apparatus that inputs an optical signal into a Mach-Zehnder optical modulator, applies a driving signal and a bias voltage to said optical modulator, and transmits an optical pulse string having a frequency two times that of the driving signal, the method comprising the steps of: taking out a part of an optical signal output from said optical modulator and converting that part of the optical signal into electric signal; extracting a frequency component of the driving signal from the obtained

electric signal; generating an error signal of a bias voltage for minimizing a value of the frequency component of the driving signal; and applying a bias voltage obtained as a result of addition of the bias voltage and a voltage corresponding to the error signal to said optical modulator (figs. 12-15 and page 2, line 23 to page 9, line 15). It would have been obvious to one of ordinary skill in the art at the time of the invention that the claimed apparatus is conventional, as disclosed by the applicant.

8. Claims 1, 4, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ooi et al. (US Patent No. 6362913).

Regarding claim 1, Ooi et al. disclose an optical transmission apparatus for transmitting an optical pulse string having a frequency two times that of a driving signal, said optical transmission apparatus comprising: a Mach-Zehnder optical modulator (fig. 34, element 2); a light source which inputs an optical signal into said optical modulator (fig. 34, element 1); a driving unit which inputs the driving signal into the optical modulator (fig. 34, element 4); a converting unit which takes out a part of an optical signal output from said optical modulator and converts that part of the optical signal into electric signal (fig. 34, elements 7 and 8); an extracting unit (fig. 34, elements 8 and 9); an error signal generating unit which generates an error signal of a bias voltage for minimizing a value of a frequency component of the driving signal extracted by said extracting unit (fig. 34, element 10); and a bias voltage control unit which applies a bias voltage to said optical modulator (fig. 34, element 12) (col. 3, line 5 to col. 4, line 2). In the figure 34 embodiment, Ooi et al. do not disclose an extracting unit which extracts a frequency component of the driving signal included in the electric signal converted by said converting unit; however this feature is disclosed in another embodiment (fig. 7, elements 57a and 57b and col. 14, line 64-67). It would have been obvious to one of ordinary skill in the

art at the time of the invention to use the bandpass filter of the figure 7 embodiment in the figure 34 embodiment as well, to raise the precision of the phase comparator, as taught by Ooi et al. Also, in the figure 34 embodiment, Ooi et al. do not disclose that the bias voltage is obtained as a result of addition of the bias voltage and a voltage corresponding to the error signal to said optical modulator; however, this feature is disclosed in another embodiment (fig. 7, element 58, inset; col. 15, lines 1-16 and col. 16, lines 2-10). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the bias control circuit disclosed for the figure 7 embodiment in the figure 34 embodiment as well, in order to control the bias voltage in a direction such that the low frequency signal component will be come zero, as taught by Ooi et al.

Regarding claims 4 and 8, Ooi et al. disclose the optical transmission apparatus according to claims 1 and 5 respectively, further comprising a dither signal generating unit which generates a dither signal that is input into the error signal generating unit (fig. 34, element 5 and fig. 25, elements 54 and 73), wherein said error signal generating unit carries out a synchronous detection by comparing a dither signal to a frequency component of a driving signal or a frequency component two times that of the driving signal extracted by said extracting unit, and outputs a result of this synchronous detection to the bias voltage control unit as an error signal of the bias voltage, and said bias voltage control unit applies to said optical modulator a signal obtained by super imposing the error signal of the bias voltage with the bias voltage (col. 3, line 5 to col. 4, line 2). Ooi et al. disclose outputting a phase difference between the dither frequency signal and the extracted frequency component (col. 3, lines 21-26 and col. 22, lines 24-36), but do not disclose multiplying the dither signal with the frequency component of the driving signal. However, Ooi et al. also disclose extracting and isolating the frequency component of the driving signal in the transmission signal using a bandpass filter (col. 14, lines

64-67) and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention that the phase difference could be achieved by multiplying the dither frequency signal by the isolated frequency component of the extracted signal to get a phase difference result. Also, Ooi et al. disclose superimposing the dither signal onto the driving signal, and disclose the driving signal and the bias voltage applied to the same modulator electrode, but do not disclose input the dither signal to the bias voltage control unit. However, it would have been obvious to one of ordinary skill in the art at the time of the invention that the dither signal could be applied to either the driving signal or the bias voltage of Ooi et al., in order to superimpose the bias signal on the transmission signal during the modulation of Ooi et al, since both the driving signal and bias voltage are applied to the same modulator electrode.

Regarding claim 9, Ooi et al. disclose a bias voltage control method for an optical modulator to be used for an optical transmission apparatus that inputs an optical signal into a Mach-Zehnder optical modulator (fig. 34, element 2), applies a driving signal and a bias voltage to said optical modulator (fig. 34, elements 4 and 12), and transmits an optical pulse string having a frequency two times that of the driving signal (col. 3, lines 42-52), the method comprising the steps of: taking out a part of an optical signal output from said optical modulator and converting that part of the optical signal into electric signal (fig. 34, elements 7 and 8); extracting a component of the output signal (fig. 34, elements 8 and 9); generating an error signal of a bias voltage for minimizing a value of the frequency component of the driving signal (fig. 34, element 10); and applying a bias voltage to said optical modulator (fig. 34, element 12) (col. 3, line 5 to col. 4, line 2). In the figure 34 embodiment, Ooi et al. do not disclose an extracting unit which extracts a frequency component of the driving signal included in the electric signal converted by said converting unit; however this feature is disclosed in another embodiment (fig. 7, elements 57a and 57b and col. 14, line 64-67). It would have been obvious

to one of ordinary skill in the art at the time of the invention to use the bandpass filter of the figure 7 embodiment in the figure 34 embodiment as well, to raise the precision of the phase comparator, as taught by Ooi et al. Also, in the figure 34 embodiment, Ooi et al. do not disclose that the bias voltage is obtained as a result of addition of the bias voltage and a voltage corresponding to the error signal to said optical modulator; however, this feature is disclosed in another embodiment (fig. 7, element 58, inset; col. 15, lines 1-16 and col. 16, lines 2-10). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the bias control circuit disclosed for the figure 7 embodiment in the figure 34 embodiment as well, in order to control the bias voltage in a direction such that the low frequency signal component will be come zero, as taught by Ooi et al.

9. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ooi et al. (US Patent No. 6362913) in view of Miyamoto et al. (US Patent No. 6559996).

Regarding claims 2 and 6, Ooi et al. disclose the optical transmission apparatus and method according to claims 1 and 5 respectively, but do not disclose that said light source generates a modulated optical pulse synchronous with the driving signal and having a bit rate two times that of the driving signal, and supplies the optical pulse to said optical modulator, and said optical modulator pulse modulates the optical pulse with the driving signal and outputs the modulated optical pulse. Miyamoto et al. disclose an optical source modulated by a clock signal synchronized with a transmission rate, and then modulated by a data signal, the double modulation producing an RZ signal (fig. 26 and col. 13, line 63 to col. 14, line 16). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a modulated source signal prior to the existing modulator in the system of Ooi et al., in order to be able to

produce an RZ transmission signal, for better transmission performance and longer transmission distance, as taught by Miyamoto et al. (col. 1, lines 30-51).

10. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ooi et al. (US Patent No. 6362913) in view of Jabr (US Patent No. 6229632).

Regarding claims 3 and 7, Ooi et al. disclose the optical transmission apparatus and method according to claims 1 and 5 respectively, but does not disclose that said light source includes a plurality of single-wavelength light sources each of which emits light having different single-wavelength, said optical transmission apparatus further comprising an optical filter, provided at the front stage of said converting unit, which transmits light having only a desired wavelength out of the lights having different wavelength emitted by said single-wavelength light sources that constitute an optical signal output from said optical modulator. Jabr disclose an optical modulator based transmitter for improving signal to noise ratio that uses a plurality of single-wavelength light sources having different wavelengths, modulating the wavelengths with a MZ modulator, followed by filtering and recombination of the wavelengths (fig. 1 and col. 2, line 43 to col. 3, line 15). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the plural wavelength source transmission method of Jabr with the stabilized bias voltage modulator of Ooi et al. to improve the signal to noise ratio of the transmission of the Ooi et al. system, as taught by Jabr. In addition, it would have been obvious to one of ordinary skill in the art at the time of the invention, in order to properly maintain the bias stabilization function of Ooi et al. when combining with the teaching of Jabr, to add a single wavelength filter at the front of the converting unit of Ooi et al., to filter out one wavelength of the plural wavelength transmission, either to extract the low frequency component if one only source wavelength were to carry the component, or to extract the component from only one

wavelength if both wavelengths were to carry the component to avoid any phase cancellation of the component that could occur from extracting the same component from both wavelengths without filtering.

11. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ooi et al. (US Patent No. 6362913) in view of Ishihara (US Patent No. 5557648).

Regarding claim 11, Ooi et al. disclose a method of making an optical transmission apparatus, comprising: providing an optical modulator to output an optical signal (fig. 25, element 52); providing a first signal generator to generate a driving signal for said optical modulator, said driving signal including a frequency component (fig. 25, element 53); and providing a second signal generator to generate an error signal generated from the frequency component, indicating a change in a bias voltage to be input to said optical modulator (fig. 25, elements 57a, 57b, 57c and 57d and col. 14, lines 61-67 and col. 22, lines 24-36); providing a controller to generate the bias voltage, said bias voltage being generated from combining said error signal with a predetermined bias voltage wherein said bias voltage and said driving signal being input to drive the optical modulator (fig. 25, element 58 and col. 22, lines 18-49). Ooi et al. disclose that said error signal is generated in a feedback loop and is generated from the frequency component, but do not disclose that it is generated from the frequency component satisfying a predetermined threshold to generate a digital detection signal which is converted to an analog signal. Ishihara discloses a control circuit including a determining circuit that DC averaging circuit for an alternating signal input and has a digitizing converter receiving a the DC signal and converting the DC signal from an analog signal to a digital signal (fig. 23 and col. 15, lines 38-59), using quantizing thresholds. It would have been obvious to an artisan at the time of the invention to use the teaching of the control circuit of Ishihara et al. for the error signal

generating circuit of Ooi et al., to provide the benefit of digital precision, based on the quantizing thresholds, in defining the level of an error signal. Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a digital-to-analog converter, which are well known in the art, at the output of the error signal generating circuit, before combining the error signal with the analog bias signal circuit for the modulator, so that the analog signal levels are compatible.

Regarding claim 12, Ooi et al. in view of Ishihara disclose the method of claim 11, wherein said providing includes providing the optical modulator to output an optical signal with a frequency two times greater than value of frequency component of the driving signal (Ooi et al.: fig. 25, element 2fo and col. 22, lines 24-36).

Regarding claim 13, Ooi et al. in view of Ishihara disclose the method of claim 11, but do not disclose minimizing the detected frequency component for the fig. 25 apparatus of Ooi et al. However, Ooi et al. disclose that providing the second signal generator to generate an error signal to minimize the value of the detected frequency component of the driving signal is conventional (fig. 34 and col. 3, lines 5-41). It would have been obvious to one of ordinary skill in the art at the time of the invention to minimize the detected frequency component in controlling the bias voltage of the modulator, as this approach using phase comparison of the detected frequency component and the generated frequency component is conventional, as taught by Ooi et al.

Regarding claim 14, Ooi et al. in view of Ishihara disclose the method of claim 11, wherein said providing includes providing the second signal generator to generate an error signal to maximize value of two times frequency component of the driving signal (fig. 25 and col. 22, lines 24-36).

Response to Arguments

12. Applicant's arguments filed 7 July 2004 regarding claims 1-10 have been fully considered but they are not persuasive.

Regarding claims 5 and 10 (and also applicable regarding claims 1-4, and 6-9), the applicant argues that Ooi et al. does not disclose the claimed error signal generating unit and the claimed bias voltage control unit. However, Ooi et al. do disclose these features. Regarding Ooi et al. fig. 7, which is also the basis for the Ooi et al. fig. 25 embodiment, Ooi et al. states "[Regarding fig. 7] The photodiode 57a, amplifying circuit 57b, phase comparator 57c and low-pass filter 57d construct the low-frequency signal detector 57 of FIG. 1 that detects drift of the operating point of the optical modulator. In order to raise the precision of the phase comparator, a bandpass filter for the frequency f.sub.0 can be inserted on the output side of the amplifying circuit 57b" (col. 14, lines 61-67). Thus this unit, also present in the fig. 25 embodiment, is an error signal generating unit, because the signal output to the bias supply circuit represents the drift of the operating point of the optical modulator. It would have been obvious to one of ordinary skill in the art at the time of the invention that a signal representing the "drift of the operating point of the optical modulator" would be considered an operating point, or bias voltage, "error" signal. Further, regarding the bias control circuit, the applicant argues that Ooi et al. do not disclose a bias voltage added with an error signal as of the bias voltage. However, both are disclosed. Ooi et al. disclose a bias voltage signal in the statement "a capacitor C for inputting a high-frequency signal from the modulator to the terminator 58b" (col. 15, lines 7-10). In addition, the bias voltage error signal (as defined above) is added from the low pass filter.

Regarding claims 1, 4 and 9, the applicant argues that the Applicant Admitted Prior Art (AARP), the applicant argues that the claimed error generating unit and bias voltage circuit are

not disclosed in the AARP. However, the AARP describes the behavior of the submitted fig. 12 circuit when the bias voltage is higher or lower than a proper value and describes how the feedback signal (ultimately output from fig. 12, element 109) responds accordingly to correct the bias voltage. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention that the output signal from fig. 12, element 109 is a bias voltage "error" signal. This error signal is then added to voltage supplied by fig. 12, element 118, before being sent to the modulator. In addition, the applicant argues that the Background of the Invention mentions there is still a need to control the stability of the bias voltage of an optical modulator. However, with regard to the AARP, the applicant states "Fig. 12 is a block diagram showing a structure of a conventional optical transmission apparatus capable of stabilizing a bias voltage applied to the optical modulator", which meets the need the applicant later describes.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

14. Any inquiry conceming this communication from the examiner should be directed to N. Curs whose telephone number is (571) 272-3028. The examiner can normally be reached M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached at (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.